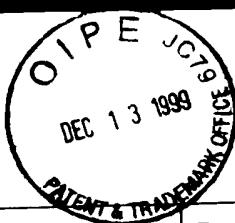




Form PTO-1449 Modified			Docket No. IBIS-0007	Serial No. 09/076,404
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)			Applicant David J. Ecker et al.	
U.S. Department of Commerce Patent and Trademark Office			Filing Date May 12, 1998	Group 1618
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)				
<i>SK</i>	AA	Adams, M.D. et al., "Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence," <i>Nature</i> , 1995 , 377(Supp. 28), 3-17		
<i>SK</i>	AB	Bruice, T.W. et al., "Control of Complexity Constraints on Combinatorial Screening for Preferred Oligonucleotide Hybridization Sites on Structured RNA," <i>Biochem.</i> , 1997 , 36, 5004-5019		
<i>SK</i>	AC	Chen, S.J. et al., "A viral long terminal repeat in the interleukin 2 gene of a cell line that constitutively produces interleukin 2," <i>Proc. Natl. Acad. Sci. USA</i> , 1985 , 82, 7284-7288		
<i>SK</i>	AD	Devos, R. et al., "Molecular cloning of human interleukin 2 cDNA and its expression in <i>E. coli</i> ," <i>Nucl. Acids Res.</i> , 1983 , 11(13), 4307-4323		
<i>SK</i>	AE	Draper, D.E., "Protein - RNA Recognition in a Highly Conserved Ribosomal Domain Targeted by Thiazole Antibiotics," <i>The Many Faces of RNA</i> , 1998 , 8, 113-125		
<i>SK</i>	AF	Efrat, S. et al., "Kinetics of induction and molecular size of mRNAs encoding human interleukin-2 and γ -interferon," <i>Nature</i> , 1982 , 297, 236-239		
<i>SK</i>	AG	Grens, A. et al., "The 5'- and 3'-Untranslated Regions of Ornithine Decarboxylase mRNA Affect the Translational Efficiency," <i>J. Biol. Chem.</i> , 1990 , 265(20), 11810-11816		
<i>SK</i>	AH	Honoré, B. et al., "Nucleotide sequence of cDNA covering the complete coding part of the human vimentin gene," <i>Nucl. Acids Res.</i> , 1990 , 18(22), 6692-		
<i>SK</i>	AI	Jäschke, A., "Catalysis of Organic Reactions by RNA - Strategies for the Selection of Catalytic RNAs," <i>The Many Faces of RNA</i> , 1998 , 12, 179-190		
<i>SK</i>	AJ	Maniatis, T. et al. (eds.), <i>Molecular Cloning: A Laboratory Manual</i> , 1982 , 405-410		
<i>SK</i>	AK	Manzella, J.M. et al., "Regulation of Rat Ornithine Decarboxylase mRNA Translation by Its 5'-Untranslated Region," <i>J. Biol. Chem.</i> , 1990 , 265(20), 11817-11822		
EXAMINER		<i>Sherif Kafafi</i>		DATE CONSIDERED <i>2/29/00</i>



Form PTO-1449 Modified

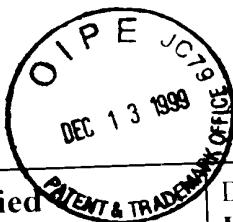
List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No. IBIS-0007	Serial No. 09/076,404
Applicant David J. Ecker et al.	
Filing Date May 12, 1998	Group 1618

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>SK</i>	AL	Moshier, J.A. et al., "Multiple promoter elements govern expression of the human ornithine decarboxylase gene in colon carcinoma cells," <i>Nucl. Acids Res.</i> , 1992 , 20(10), 2581-2590
<i>SK</i>	AM	Naora, H. et al., "Mechanisms Regulating the mRNA Levels of Interleukin-5 and Two Other Coordinately Expressed Lymphokines in the Murine T Lymphoma EL4.23," <i>Blood</i> , 1994 , 83(12), 3620-3628
<i>SK</i>	AN	Poliskiy, B., "Progress towards Therapeutic Application of SELEX-derived Aptamers," <i>The Many Faces of RNA</i> , 1998 , 11, 161-177
<i>SK</i>	AO	Przybylski, M. et al., "Mass spectrometric approaches to molecular characterization of protein-nucleic acid interactions," <i>Toxicology Letts.</i> , 1995 , 82/83, 567-575
<i>SK</i>	AP	Ryan, P.C. et al., "Thermodynamics of Protein-RNA Recognition in a Highly Conserved Region of the Large-Subunit Ribosomal RNA," <i>Biochem.</i> , 1989 , 28, 9949-9956
<i>SK</i>	AQ	Sannes-Lowery, K.A. et al., "HIV-1 Tat Peptide Binding to TAR RNA by Electrospray Ionization Mass Spectrometry," <i>Anal. Chem.</i> , 1997 , 69, 5130-5135
<i>SK</i>	AR	Stryer, L. (ed.), <i>Biochemistry</i> , Third Edition, W.H. Freeman and Company, New York, 1975 , 86-88 and 91-95
<i>SK</i>	AS	van Kranen, H.J. et al., "Cloning and nucleotide sequence of rat ornithine decarboxylase cDNA," <i>Gene</i> , 1987 , 60, 145-155
<i>SK</i>	AT	Wen, L. et al., "Rat Ornithine Decarboxylase Gene: Nucleotide Sequence, Potential Regulatory Elements, and Comparison to the Mouse Gene," <i>J. Biol. Chem.</i> , 1989 , 264(15), 9016-9021
<i>SK</i>	AU	Zehner, Z.E. et al., "RNA-protein interactions within the 3' untranslated region of vimentin mRNA," <i>Nucl. Acids Res.</i> , 1997 , 25(16), 3362-3370
EXAMINER	<i>Sherif Kelaf</i>	DATE CONSIDERED 2/29/00



Sheet 3 of 3

Form PTO-1449 Modified

**List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)**

U.S. Department of Commerce
Patent and Trademark Office

Docket No. **IBIS-0007** | Serial No. **09/076,404**

Applicant
David J. Ecker et al.

Filing Date	Group
May 12, 1998	1618

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT					Translation	
Examiner Initial		Document No.	Date	Country	YES	NO
SK	AV	0 230 107 A1	07/29/87	EP	X	
EXAMINER	Sheikh Kalaf		DATE CONSIDERED		2	29/00



Sheet 1 of 2

Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No. IBIS-0007	Serial No. 09/076,404
--------------------------------	---------------------------------

Applicant David J. Ecker et al.

Filing Date May 12, 1998	Group 1643
------------------------------------	----------------------

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

SK

AA

PCT International Search Report dated July 7, 1999, 6 pages

SK

AB

Czarnik, A.W. et al. (eds.), *A Practical Guide to Combinatorial Chemistry*, American Chemical Society, Washington, DC, 1997, Chs. 2, 13, and 14, 17-47 and 357-412

EXAMINER

Sherif Kafel

DATE CONSIDERED

3/1/00



Sheet 2 of 2

Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No. IBIS-0007	Serial No. 09/076,404
<p>Applicant David J. Ecker et al.</p>	
Filing Date May 12, 1998	Group 1643

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS



Form PTO-1449 Modified		Docket No. IBIS-0007	Serial No. 09/076,404
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant David J. Ecker et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date May 12, 1998	Group 1643
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
SK	AA	Abagyan et al., "ICM - A Method for Protein Modeling and Design: Applications to Docking and Structure Prediction from the Distorted Native Conformation", <i>J. Comp. Chem.</i> , 1994 , 15(5), 488-506	
SK	AB	Addess et al., "Structure and Dynamics of the Iron Responsive Element RNA: Implications for Binding of the RNA by Iron Regulatory Binding Proteins", <i>J. Mol. Biol.</i> , 1997 , 274, 72-83	
SK	AC	Amster, "Fourier Transform Mass Spectrometry", <i>J. Mass Spectrom.</i> , 1996 , 31, 1325-1337	
SK	AD	Anderegg et al., "Mass Spectrometric Characterization of a Protein - Ligand Interaction", <i>J. Am. Chem. Soc.</i> , 1995 , 117, 1374-1377	
SK	AE	Atherton et al., in <i>Solid Peptide Synthesis: A Practical Approach</i> , IRL Press, Oxford, UK, 1989 , 135	
SK	AF	Baca et al., "Direct Observation of a Ternary Complex between the Dimeric Enzyme HIV-1 Protease and a Substrate-Based Inhibitor", <i>J. Am. Chem. Soc.</i> , 1992 , 114, 3992-3993	
SK	AG	Baczynskyj et al., "Application of Thermally Assisted Electrospray Ionization Mass Spectrometry for Detection of Noncovalent Complexes of Bovine Serum Albumin with Growth Hormone Releasing Factor and Other Biologically Active Peptides", <i>Rapid Commun. Mass Spectrom.</i> , 1994 , 8, 280-286	
SK	AH	Bayer et al., "Analysis of Double-Stranded Oligonucleotides by Electrospray Mass Spectrometry", <i>Anal. Chem.</i> , 1994 , 66, 3858-3863	
SK	AI	Benson et al., "GenBank", <i>Nucl. Acids Res.</i> , 1998 , 26(1), 1-7	
SK	AJ	Berson et al., "General Principles of Radioimmunoassay", <i>Clin. Chim. Acta</i> , 1968 , 22, 51-60	
SK	AK	Brown, J.W., "Phylogenetic analysis of RNA structure on the Macintosh computer", <i>CABIOS Commun.</i> , 1991 , 7(3), 391-393	
EXAMINER	<i>Sherif Kalaf</i>		DATE CONSIDERED 3/2/00

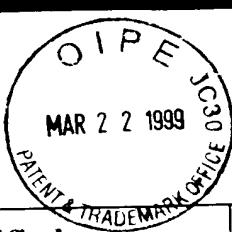


Form PTO-1449 Modified		Docket No. IBIS-0007	Serial No. 09/076,404
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Applicant David J. Ecker et al.	
U.S. Department of Commerce Patent and Trademark Office		Filing Date May 12, 1998	Group 1643
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
SK	AL	Bruce et al., "Bio-Affinity Characterization Mass Spectrometry", <i>Rapid Commun. Mass Spectrom.</i> , 1995 , 9, 644-650	
SK	AM	Bruins et al., "Ion Spray Interface for Combined Liquid Chromatography/Atmospheric Pressure Ionization Mass Spectrometry", <i>Anal. Chem.</i> , 1987 , 59, 2642-2646	
SK	AN	Busman et al., "Observation of Large Multimers in the Electrospray Ionization Mass Spectrometry of Peptides", <i>Rapid Commun. Mass Spectrom.</i> , 1994 , 8, 211-216	
SK	AO	Cai et al., "Capillary electrohoresis - mass spectrometry", <i>J. Chromatogr.</i> , 1995 , 703, 667-692	
SK	AP	Cain et al., "Solution structure of a DNA hairpin and its disulfide cross-linked analog", <i>Nucl. Acids Res.</i> , 1995 , 23(12), 2153-2160	
SK	AQ	Cedergren et al., "Modeling the Tertiary Structure of RNA" in <i>RNA Structure and Function</i> , Cold Spring Harbor Laboratory Press, 1988 , 37-75	
SK	AR	Chattopadhyaya et al., "X-ray structure of a DNA hairpin molecule", <i>Nature</i> , 1988 , 334, 175-179	
SK	AS	Chen et al., "Structure-Based Discovery of Ligands Targeted to the RNA Double Helix", <i>Biochem.</i> , 1997 , 36, 11402-11407	
SK	AT	Chen et al., "Spectroscopic recognition of guanine dimeric hairpin quadruplexes by a carbocyanine dye", <i>Proc. Natl. Acad. Sci.</i> , 1996 , 93, 2635-2639	
SK	AU	Cheng et al., "Using Electrospray Ionization FTICR Mass Spectrometry to Study Competitive Binding of Inhibitors to Carbonic Anhydrase", <i>J. Am. Chem. Soc.</i> , 1995 , 117, 8859-8860	
EXAMINER	<i>Sheri Kopf</i>		DATE CONSIDERED 3/2/00

Form PTO-1449 Modified		O I P E J C 3 U M A R 2 2 1999 P A T E N T & T R A D E M A R K O F F I C E	
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		Docket No. IBIS-0007	Serial No. 09/076,404
U.S. Department of Commerce Patent and Trademark Office		Applicant David J. Ecker et al.	
		Filing Date May 12, 1998	Group 1643
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
<i>SK</i>	AV	Cheng et al., "Electrospray Ionization with High Performance Fourier Transform Ion Cyclotron Resonance Mass Spectrometry for the Study of Noncovalent Biomolecular Complexes", in <i>Techniques in Protein Chemistry</i> , 1996 , Vol. 7, 13-21	
<i>SK</i>	AW	Cheong et al., "Solution structure of an unusually stable RNA hairpin, 5'GGAC(UUCG)GUCC", <i>Nature</i> , 1990 , 346, 680-682	
<i>SK</i>	AX	Cohen et al., "Probing the solution structure of the DNA-binding protein Max by a combination of proteolysis and mass spectrometry", <i>Protein Sci.</i> , 1995 , 4, 1088-1099	
<i>SK</i>	AY	Chu et al., "Affinity Capillary Electrophoresis", <i>Acc. Chem. Res.</i> , 1995 , 28, 461-468	
<i>SK</i>	AZ	Chu et al., "Using Affinity Capillary Electrophoresis to Identify the Peptide in a Peptide Library that Binds Most Tightly to Vancomycin", <i>J. Org. Chem.</i> , 1993 , 58, 648-652	
<i>SK</i>	BA	Chu et al., "Affinity Capillary Electrophoresis - Mass Spectrometry for Screening Combinatorial Libraries", <i>J. Am. Chem. Soc.</i> , 1996 , 118, 7827-7835	
<i>SK</i>	BB	Doctycz et al., "Accumulation and Storage of Ionized Duplex DNA Molecules in a Quadrupole Ion Trap", <i>Anal. Chem.</i> , 1994 , 66, 3416-3422	
<i>SK</i>	BC	Dunayevskiy et al., "Mass Spectrometric Identification of Ligands Selected from Combinatorial Libraries Using Gel Filtration", <i>Rapid Commun. Mass Spectrom.</i> , 1997 , 11, 1178-1184	
<i>SK</i>	BD	Ecker et al., "Combinatorial Drug Discovery: Which Methods Will Produce the Greatest Value", <i>Biotech.</i> , 1995 , 13, 351-360	
<i>SK</i>	BE	Erie et al., "A Monte Carlo Method for Generating Structures of Short Single-Stranded DNA Sequences", <i>Biopolymers</i> , 1993 , 33, 75-105	
EXAMINER		DATE CONSIDERED <u>3/2/00</u>	



Form PTO-1449 Modified			Docket No. IBIS-0007	Serial No. 09/076,404
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)			Applicant David J. Ecker et al.	
U.S. Department of Commerce Patent and Trademark Office			Filing Date May 12, 1998	Group 1643
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)				
<i>SK</i>	BF	Erickson et al., "Macromolecular X-Ray Crystallography and NMR as Tools for Structure-based Drug Design", <i>Ann. Rep. Med. Chem.</i> , 1992 , Vol. 27, Ch. 29, 271-289		
<i>SK</i>	BG	Feng et al., "Analysis of Antibodies and Other Large Glycoproteins in the Mass Range of 150 000 - 200 000 Da by Electrospray Ionization Mass Spectrometry", <i>Anal. Chem.</i> , 1992 , 64, 2090-2095		
<i>SK</i>	BH	Feng et al., "HIV-1 <i>tat</i> trans-activation requires the loop sequence within <i>tar</i> ", <i>Nature</i> , 1988 , 334, 165-167		
<i>SK</i>	BI	Filikov et al., "Structure-based design of ligands for protein basic domains: Application to the HIV-1 Tat protein", <i>J. Comp.-Aided Molec. Design</i> , 1998 , 12, 229-240		
<i>SK</i>	BJ	Gale et al., "Observation of Duplex DNA-Drug Noncovalent Complexes by Electrospray Ionization Mass Spectrometry", <i>J. Am. Chem. Soc.</i> , 1994 , 116, 6027-6028		
<i>SK</i>	BK	Ganem et al., "Detecting Noncovalent Complexes of Biological Macromolecules: New Applications of Ion-Spray Mass Spectrometry", <i>ChemTracts-Org. Chem.</i> , 1993 , 6, 1-22		
<i>SK</i>	BL	Ganem et al., "Detection of Oligonucleotide Duplex Forms by Ion-Spray Mass Spectrometry", <i>Tetra. Lett.</i> , 1993 , 34(9), 1445-1448		
<i>SK</i>	BM	Gao et al., "Screening Derivatized Peptide Libraries for Tight Binding Inhibitors to Carbonic Anhydrase II by Electrospray Ionization-Mass Spectrometry", <i>J. Med. Chem.</i> , 1996 , 39, 1949-1955		
<i>SK</i>	BN	Gautheret et al., "Inferring the conformation of RNA base pairs and triples from patterns of sequence variation", <i>Nucl. Acids Res.</i> , 1997 , 25(8), 1559-1564		
<i>SK</i>	BO	Gautheret et al., "G-U base pairing motifs in ribosomal RNA", <i>RNA</i> , 1995 , 1, 807-814		
EXAMINER <i>Sheila K. J.</i>		DATE CONSIDERED <i>3/3/00</i>		



Form PTO-1449 Modified			Docket No. IBIS-0007	Serial No. 09/076,404
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)			Applicant David J. Ecker et al.	
U.S. Department of Commerce Patent and Trademark Office			Filing Date May 12, 1998	Group 1643
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)				
<i>SK</i>	BP	Gautheret et al., "Identification of Base-triples in RNA using Comparative Sequence Analysis", <i>J. Mol. Biol.</i> , 1995 , 248, 27-43		
<i>SK</i>	BQ	Gdaniec et al., "Iron Regulatory Element and Internal Loop/Bulge Structure for Ferritin mRNA Studied by Cobalt(III) Hexammine Binding, Molecular Modeling, and NMR Spectroscopy", <i>Biochem.</i> , 1998 , 37, 1505-1512		
<i>SK</i>	BR	Glover et al., "Sequencing of Oligonucleotides Using High Performance Liquid Chromatography and Electrospray Mass Spectrometry", <i>Rapid Commun. Mass Spectrom.</i> , 1995 , 9, 897-901		
<i>SK</i>	BS	Goodlett et al., "Direct Observation of a DNA Quadruplex by Electrospray Ionization Mass Spectrometry", <i>Biol. Mass Spectrom.</i> , 1993 , 22, 181-183		
<i>SK</i>	BT	Greig et al., "Measurement of Macromolecular Binding Using Electrospray Mass Spectrometry. Determination of Dissocation Constants for Oligonucleotide - Serum Albumin Complexes", <i>J. Am. Chem. Soc.</i> , 1995 , 117, 10765-10766		
<i>SK</i>	BU	Gschwend et al., "Orientational sampling and rigid-body minimization in molecular docking revisited: On-the-fly optimization and degeneracy removal", <i>J. Compt.-Aided Mol. Des.</i> , 1996 , 10, 123-132		
<i>SK</i>	BV	Gutell, "Collection of small subunit (16S- and 16S-like) ribosomal RNA structures: 1994", <i>Nucl. Acids Res.</i> , 1994 , 22(17), 3502-3507		
<i>SK</i>	BW	Gutell, "Collection of small subunit (16S- and 16S-like) ribosomal RNA structures", <i>Nucl. Acids Res.</i> , 1993 , 21(13), 3051-3054		
<i>SK</i>	BX	Gutell, "A compilation of large subunit (23S and 23S-like) ribosomal RNA structures: 1993", <i>Nucl. Acids Res.</i> , 1993 , 21(13), 3055-3074		
<i>SK</i>	BY	Henion et al., "Mass Spectrometric Investigations of Drug-Receptor Interactions", <i>Ther. Drug Monitoring</i> , 1993 , 15(6), 563-569		
EXAMINER		<i>Sheila Kojel</i>		DATE CONSIDERED 3/3/00



Form PTO-1449 Modified

Docket No. **IBIS-0007** Serial No. **09/076,404**

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Applicant
David J. Ecker et al.

Filing Date **May 12, 1998** Group **1643**

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>SK</i>	BZ	Hillenkamp et al., "Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry of Biopolymers", <i>Anal. Chem.</i> , 1991 , 63(24), 1193A-1202A
<i>SK</i>	CA	Hu et al., "Determining Calcium-binding Stoichiometry and Cooperativity of Parvalbumin and Calmodulin by Mass Spectrometry", <i>J. Mass Spectrom.</i> , 1995 , 30, 1076-1079
<i>SK</i>	CB	Huang et al., "Packed-Capillary Liquid Chromatography/Ion-Spray Tandem Mass Spectrometry Determination of Biomolecules", <i>Anal. Chem.</i> , 1991 , 63, 732-739
<i>SK</i>	CC	Huang et al., "LC/MS and LC/MS/MS Determination of Protein Tryptic Digests", <i>J. Am. Soc. Mass Spectrom.</i> , 1990 , 1(2), 158-165
<i>SK</i>	CD	Jefson, "Applications of NMR Spectroscopy to Protein Structure Determination", <i>Ann. Rep. Med. Chem.</i> , 1988 , Vol. 23, Ch. 28, 275-283
<i>SK</i>	CE	Jensen et al., "Mass Spectrometric Characterization of UV-Crosslinked Protein-Nucleic Acid Complexes", <i>42nd ASMS Conf. On Mass Spectrom. and Allied Topics</i> , 1994 , 923
<i>SK</i>	CF	Jensen et al., "Direct Observation of UV-crosslinked Protein-Nucleic Acid Complexes by Matrix-assisted Laser Desorption Ionization Mass Spectrometry", <i>Rapid Commun. Mass Spectrom.</i> , 1993 , 7, 496-501
<i>SK</i>	CG	Jonsson et al., "Real-Time Biospecific Interaction Analysis Using Surface Plasmon Resonance and a Sensor Chip Technology", <i>Biotech.</i> , 1991 , 11(5), 620-627
<i>SK</i>	CH	Jones, "A Graphics Model Building and Refinement System for Macromolecules", <i>J. Appl. Crystallogr.</i> , 1978 , 11, 268-272
<i>SK</i>	CI	Karlsson et al., "Kinetic analysis of monoclonal antibody-antigen interactions with a new biosensor based analytical system", <i>J. Immunol. Methods</i> , 1991 , 145, 229-240

EXAMINER

Sherif Kafaf

DATE CONSIDERED

3/3/00

**Form PTO-1449 Modified**

Docket No. IBIS-0007	Serial No. 09/076,404
--------------------------------	---------------------------------

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

Applicant David J. Ecker et al.

U.S. Department of Commerce
Patent and Trademark Office

Filing Date May 12, 1998	Group 1643
------------------------------------	----------------------

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>SK</i>	CJ	Kassel et al., "Direct Coupling of an Automated 2-Dimensional Microcolumn Affinity Chromatography-Capillary HPLC System with Mass Spectrometry for Biomolecular Analysis", in <i>Techniques in Protein Chemistry</i> , J.Crabb (ed.), Academic Press, San Diego, 1995 , Ch. VI, 39-46
<i>SK</i>	CK	Knight et al., "Electrospray Ionization Mass Spectrometry as a Mechanistic Tool: Mass of Human Leucocyte Elastase and a β -Lactam-Derived E-I Complex", <i>Biochem.</i> , 1993 , 32, 2031-2035
<i>SK</i>	CL	Kozak, "Structural Features in Eukaryotic mRNAs That Modulate the Initiation of Translation", <i>J. Biol. Chem.</i> , 1991 , 266(30), 19867-19870
<i>SK</i>	CM	Kuntz et al., "Structure-Based Molecular Design", <i>Acc. Chem. Res.</i> , 1994 , 27(5), 117-123
<i>SK</i>	CN	Kuntz et al., "A Geometric Approach to Macromolecule-Ligand Interactions", <i>J. Mol. Biol.</i> , 1982 , 161, 269-288
<i>SK</i>	CO	Laferriere et al., "An RNA pattern matching program with enhanced performance and portability", <i>Comput. Appl. Biosci.</i> , 1994 , 10(2), 211-212
<i>SK</i>	CP	Lane et al., "SPARC Is a Source of Copper-binding Peptides that Stimulate Angiogenesis", <i>J. Cell Biol.</i> , 1994 , 125(4), 929-943
<i>SK</i>	CQ	Li et al., "Mass Spectrometric Studies on Noncovalent Dimers of Leucine Zipper Peptides", <i>J. Am. Chem. Soc.</i> , 1993 , 115, 8409-8413
<i>SK</i>	CR	Light-Wahl et al., "Observation of a Small Oligonucleotide Duplex by Electrospray Ionization Mass Spectrometry", <i>J. Am. Chem. Soc.</i> , 1993 , 115, 803-804
<i>SK</i>	CS	Light-Wahl et al., "Observation of the Noncovalent Quaternary Associations of Proteins by Electrospray Ionization Mass Spectrometry", <i>J. Am. Chem. Soc.</i> , 1994 , 116, 5271-5278

EXAMINER

Sherif Kefay

DATE CONSIDERED

3/3/00



Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No.
IBIS-0007

Serial No.
09/076,404

Applicant
David J. Ecker et al.

Filing Date
May 12, 1998

Group
1643

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>SK</i>	CT	Light-Wahl et al., "Collisionally Activated Dissociation and Tandem Mass Spectrometry of Intact Hemoglobin β -Chain Variant Proteins with Electrospray Ionization", <i>Biol. Mass Spectrom.</i> , 1993 , 22, 112-120
<i>SK</i>	CU	Lim et al., "Recognition of Cell-wall Peptide Ligands by Vancomycin Group Antibiotics: Studies Using Ion Spray Mass Spectrometry", <i>J. Mass Spectrom.</i> , 1995 , 30, 708-714
<i>SK</i>	CV	Little et al., "Rapid Sequencing of Oligonucleotides by High-Resolution Mass Spectrometry", <i>J. Am. Chem. Soc.</i> , 1994 , 116, 4893-4897
<i>SK</i>	CW	Little et al., "Sequencing 50-mer DNAs Using Electrospray Tandem Mass Spectrometry and Complementary Fragmentation Methods", <i>J. Am. Chem. Soc.</i> , 1995 , 117, 6783-6784
<i>SK</i>	CX	Little et al., "Infrared Multiphoton Dissociation of Large Multiply Charged Ions for Biomolecule Sequencing", <i>Anal. Chem.</i> , 1994 , 66, 2809-2815
<i>SK</i>	CY	Little et al., "Verification of 50- to 100-mer DNA and RNA sequences with high-resolution mass spectrometry", <i>Proc. Natl. Acad. Sci. USA</i> , 1995 , 92, 2318-2322
<i>SK</i>	CZ	Lodmell et al., "Genetic and comparative analyses reveal an alternative secondary structure in the region of nt 912 <i>Escherichia coli</i> 16S rRNA", <i>Proc. Natl. Acad. Sci. USA</i> , 1995 , 92, 10555-10559
<i>SK</i>	DA	Loo, "Bioanalytical Mass Spectrometry: Many Flavors to Choose", <i>Bioconjugate Chem.</i> , 1995 , 6, 644-665
<i>SK</i>	DB	Loo, "Observation of Large Subunit Protein Complexes by Electrospray Ionization Mass Spectrometry", <i>J. Mass Spectrom.</i> , 1995 , 30, 180-183
<i>SK</i>	DC	Loo et al., "Use of Electrospray Ionization Mass Spectrometry to Probe Antisense Peptide Interactions", <i>Biol. Mass Spectrom.</i> , 1994 , 23, 6-12

EXAMINER

Sherif Kalaf

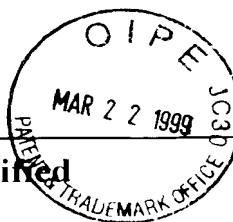
DATE CONSIDERED

3/3/00

O P
MAR 22 1999

Sheet 9 of 14

Form PTO-1449 Modified		
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)		
U.S. Department of Commerce Patent and Trademark Office		
Docket No. IBIS-0007		Serial No. 09/076,404
Applicant David J. Ecker et al.		
Filing Date May 12, 1998		Group 1643
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
<i>SK</i>	DD	Loo et al., "Interaction of Angiotensin Peptides and Zinc Metal Ions Probed by Electrospray Ionization Mass Spectrometry", <i>J. Am. Soc. Mass Spectrom.</i> , 1994 , 5(11), 959-965
<i>SK</i>	DE	Major et al., "Reproducing the three-dimensional structure of a tRNA molecule from structural constraints", <i>Proc. Natl. Acad. Sci.</i> , 1993 , 90, 9408-9412
<i>SK</i>	DF	Marshall et al., "Fourier Transform Ion Cyclotron Resonance Mass Spectrometry: The Teenage Years", <i>Anal. Chem.</i> , 1991 , 63(4), A215-A229
<i>SK</i>	DG	McLuckey et al., "Tandem Mass Spectrometry of Small, Multiply Charged Oligonucleotides", <i>J. Am. Soc. Mass Spectrom.</i> , 1992 , 3(1), 60-70
<i>SK</i>	DH	McLuckey et al., "Decompositions of Multiply Charged Oligonucleotide Anions", <i>J. Am. Chem. Soc.</i> , 1993 , 115, 12085-12095
<i>SK</i>	DI	Meng et al., "Automated Docking with Grid-Based Energy Evaluation", <i>J. Comp. Chem.</i> , 1992 , 13(4), 505-524
<i>SK</i>	DJ	Moras et al., "Crystal structure of yeast tRNA", <i>Nature</i> , 1980 , 288, 669-674
<i>SK</i>	DK	Mueller et al., "A New Model for the Three-dimensional Folding of <i>Escherichia coli</i> 16S Ribosomal RNA. I. Fitting the RNA to a 3D Electron Microscopic Map at 20 Å", <i>J. Mol. Biol.</i> , 1997 , 271, 524-544
<i>SK</i>	DL	Nelson et al., "Mass Determination of Human Immunoglobulin IgM Using Matrix-assisted Laser Desorption/Ionization Time-of-flight Mass Spectrometry", <i>Rapid Commun. Mass Spectrom.</i> , 1994 , 8, 627-631
<i>SK</i>	DM	Ni et al., "Interpretation of Oligonucleotide Mass Spectra for Determination of Sequence Using Electrospray Ionization and Tandem Mass Spectrometry", <i>Anal. Chem.</i> , 1996 , 68, 1989-1999
EXAMINER	<i>Sherif K. Jafri</i>	
		DATE CONSIDERED <i>3/3/05</i>



Form PTO-1449 Modified

Docket No. **IBIS-0007** Serial No. **09/076,404**

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Applicant
David J. Ecker et al.

Filing Date **May 12, 1998** Group **1643**

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>SK</i>	DN	Nordhoff et al., "Direct Mass Spectrometric Sequencing of Low-picomole Amounts of Oligodeoxynucleotides with up to 21 Bases by Matrix-assisted Laser Desorption/Ionization Mass Spectrometry", <i>J. Mass Spectrom.</i> , 1995 , 30, 99-112
<i>SK</i>	DO	Pain, "Initiation of protein synthesis in eukaryotic cells", <i>Eur. J. Biochem.</i> , 1996 , 236, 747-771
<i>SK</i>	DP	Phillipe et al., "Target Site of <i>Escherichia coli</i> Ribosomal Protein S15 on its Messenger RNA: Conformation and Interaction with the Protein", <i>J. Mol. Biol.</i> , 1990 , 211, 415-426
<i>SK</i>	DQ	Pieles et al., "Matrix-assisted laser desorption ionization time-of-flight mass spectrometry: a powerful tool for the mass and sequence analysis of natural and modified oligonucleotides", <i>Nucl. Acid Res.</i> , 1993 , 21(14), 3191-3196
<i>SK</i>	DR	Quigley et al., "Yeast phenylalanine transfer RNA: atomic coordinates and torsion angles", <i>Nucl. Acids Res.</i> , 1975 , 2(12), 2329-2341
<i>SK</i>	DS	Raghunathan et al., "Conformational Feasibility of a Hairpin with Two Purines in the Loop. 5'-d-GGTACIAGTACC-3'", <i>Biochem.</i> , 1991 , 30, 782-788
<i>SK</i>	DT	Rossomando et al., "Identification of Tyr-185 as the site of tyrosine autophosphorylation of recombinant mitogen-activated protein kinase p42 ^{mapk} ", <i>Proc. Natl. Acad. Sci USA</i> , 1992 , 89, 5779-5783
<i>SK</i>	DU	Shaler et al., "Analysis of Enzymatic DNA Sequencing Reactions by Matrix-assisted Laser Desorption/Ionization Time-of-flight Mass Spectrometry", <i>Rapid Commun. Mass Spectrom.</i> , 1995 , 9, 942-947
<i>SK</i>	DV	Shen et al., "RNA structure at high resolution", <i>FASEB J.</i> , 1995 , 9, 1023-1033
<i>SK</i>	DW	Smith et al., "The Observation of Non-covalent Interactions in Solution by Electrospray Ionization Mass Spectrometry: Promise, Pitfalls and Prognosis", <i>J. Biol. Mass Spectrom.</i> , 1993 , 22, 493-501

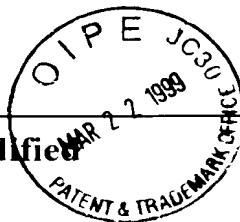
EXAMINER

Sherif Kalaf

DATE CONSIDERED

3/3/00

Form PTO-1449 Modified



List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Docket No. IBIS-0007	Serial No. 09/076,404
	Applicant David J. Ecker et al.	
	Filing Date May 12, 1998	Group 1643

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>SK</i>	EH	Westhof et al., "Three-dimensional working model of M1 RNA, the catalytic RNA subunit of ribonuclease P from <i>Escherichia coli</i> ", <i>Proc. Natl. Acad. Sci.</i> , 1994 , 91, 5133-5137
<i>SK</i>	EI	Wilson, "Computers Customize Combinatorial Libraries", <i>C&EN</i> , April 17 1998 , 31-37
<i>SK</i>	EJ	Winger et al., "High-Resolution Accurate Mass Measurements of Biomolecules Using a New Electrospray Ionization Ion Cyclotron Resonance Mass Spectrometer", <i>J. Am. Soc. Mass Spectrom.</i> , 1993 , 4(7), 566-577
<i>SK</i>	EK	Witherell et al., "Specific Interaction between RNA Phage Coat Proteins and RNA", <i>Prog. Nucl. Acids Res. Mol. Biol.</i> , 1991 , 40, 185-220
<i>SK</i>	EL	Witkowska et al., "Mass Spectrometric Analysis of a Native Zinc-Finger Structure: The Glucocorticoid Receptor DNA Binding Domain", <i>J. Am. Chem. Soc.</i> , 1995 , 117(12), 3319-3324
<i>SK</i>	EM	Woese et al., "Evidence for several higher order structural elements in ribosomal RNA", <i>Proc. Natl. Acad. Sci. USA</i> , 1989 , 86, 3119-3122
<i>SK</i>	EN	Woese et al., "Secondary structure model for bacterial 16S ribosomal RNA: phylogenetic, enzymatic and chemical evidence", <i>Nucl. Acids Res.</i> , 1980 , 8(10), 2275-2293

EXAMINER

DATE CONSIDERED

3/3/00



Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No.
IBIS-0007

Serial No.
09/076,404

Applicant
David J. Ecker et al.

Filing Date
May 12, 1998

Group
1643

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
SK	FB	5,372,672	12/13/94	Seifert et al.	156	584
SK	FC	5,472,672	12/05/95	Brennan	422	131
SK	FD	5,529,756	06/25/96	Brennan	422	131
SK	FE	5,571,902	11/05/96	Ravikumar et al.	536	22.1

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation
					YES NO

EXAMINER

Sherif Kefel

DATE CONSIDERED

3/3/00



Form PTO-1449 Modified

Docket No.
IBIS-0007Serial No.
09/076,404

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Applicant
David J. Ecker et al.Filing Date
May 12, 1998Group
1643

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

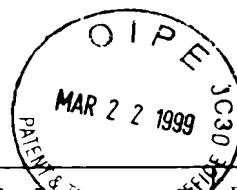
* <i>SK</i>	EO	Adams et al., in <i>Automated DNA Sequencing and Analysis</i> , Academic Press, San Diego, 1994
* <i>SK</i>	EP	Brown, in <i>DNA Sequencing</i> , IRL Oxford University Press, Oxford, 1994
* <i>SK</i>	EQ	Chard, in <i>An Introduction to Radioimmunoassay and Related Techniques</i> , Elsevier Press, Amsterdam/New York, 1982
* <i>SK</i>	ER	Cole, in <i>Electrospray Ionization Mass Spectrometry: Fundamentals, Instrumentation</i> , Wiley, New York, 1997
* <i>SK</i>	ES	Copeland, in <i>Methods of Protein Analysis: A Practical Guide to Laboratory Protocols</i> , Chapman and Hall, New York, 1994
* <i>SK</i>	ET	Creighton, in <i>Protein Folding</i> , W.H. Freeman and Co., 1992
* <i>SK</i>	EU	Czarnik, A.W. et al. (eds.), <i>Practical Guide to Combinatorial Chemistry</i> , ACS, Washington, D.C., 1997
* <i>SK</i>	EV	Findlay et al., in <i>Protein Sequencing: A Practical Approach</i> , IRL Press, Oxford, 1989
* <i>SK</i>	EW	Gutell et al., "Comparative Sequence Analysis of Experiments Performed During Evolution", In <i>Ribosomal RNA Group I Introns</i> , Green (ed.), Austin: Landes, 1996
* <i>SK</i>	EX	Kemeny et al., in <i>ELISA and Other Solid Phase Immunoassays: Theoretical and Practical Aspects</i> , Wiley, New York, 1988
* <i>SK</i>	EY	Loo et al., in <i>Proc. 43rd ASMS Conf. On Mass Spectrom. and Allied Topics</i> , 1995
* <i>SK</i>	EZ	Smith, in <i>Protein Sequencing Protocols</i> , Humana Press, Totowa, NY, 1997
* <i>SK</i>	FA	Snyder, in <i>Biochemical and Biotechnological Applications of Electrospray Ionization Mass</i> , American Chemical Society, Washington, DC, 1996

EXAMINER

DATE CONSIDERED

3/3/98

*A copy of this reference will not be forwarded to the U.S. Patent and Trademark Office since it is believed to be too voluminous and easily obtainable by the Examiner.

**Form PTO-1449 Modified**

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No.
IBIS-0007

Serial No.
09/076,404

Applicant
David J. Ecker et al.

Filing Date
May 12, 1998

Group
1643

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>SK</i>	DX	Smith et al., "New Developments in Biochemical Mass Spectrometry: Electrospray Ionization", <i>Anal. Chem.</i> , 1990 , 62, 882-899
<i>SK</i>	DY	Standart et al., "Regulation of translation by specific protein/mRNA interactions", <i>Biochimie</i> , 1994 , 76, 867-879
<i>SK</i>	DZ	Sternberg et al., "Display of peptides and proteins on the surface of bacteriophage λ ", <i>Proc. Natl. Acad. Sci. USA</i> , 1995 , 92, 1609-1613
<i>SK</i>	EA	Sutton et al., "TIGR Assembler: A New Tool for Assembling Large Shotgun Sequencing Projects", <i>Genome Science & Tech.</i> , 1995 , 1(1), 9-19
<i>SK</i>	EB	Thompson et al., "CLUSTAL W: improving the sensitivity of progressive multiple sequence alignment through sequence weighting, position-specific gap penalties and weight matrix choice", <i>Nucl. Acids Res.</i> , 1994 , 22(22), 4673-4680
<i>SK</i>	EC	Tung, "A Computational Approach to Modeling Nucleic Acid Hairpin Structures", <i>Biophysical J.</i> , 1997 , 72, 876-885
<i>SK</i>	ED	Udenfriend et al., "Scintillation Proximity Assay: A Sensitive and Continuous Isotopic Method for Monitoring Ligand/Receptor and Antigen/Antibody Interactions", <i>Anal. Biochem.</i> , 1987 , 161, 494-500
<i>SK</i>	EE	Valegard et al., "Crystal structure of an RNA bacteriophage coat protein - operator complex", <i>Nature</i> , 1994 , 371, 623-626
<i>SK</i>	EF	Varani et al., "The Structure of the Human Immunodeficiency Virus Type-1 TAR RNA Reveals Principles of RNA Recognition by Tat Protein", <i>J. Mol. Biol.</i> , 1995 , 253, 313-332
<i>SK</i>	EG	Westhof et al., "Computer-Aided Structural Biochemistry of Ribonucleic Acids", in <i>Theoretical Biochemistry and Molecular Biophysics</i> , Beveridge and Lavery (eds.), Adenine, NY, 1991 , 399-409

EXAMINER

Sherif Kafaf

DATE CONSIDERED

3/3/00